DOCUMENT RESUME

ED 197 737 IR 009 135

AUTHOR Pache, J. E.
TITLE On-Line Access to the EUDISED R&D Data Base: A Cost-Benefit Analysis [and] Computerization of the Data Base of the Documentation Centre for Education in Europe: A Preliminary Option Survey.
INSTITUTION Council for Cultural Cooperation, Strasbourg (France).
REPORT NO DESC/Doc-80-29
PUB DATE 5 Sep 80
NOTE 25p.: For related documents, see ED 140 827, ED 142 175, and ED 165 748.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cost Effectiveness: *Databases: *Educational Research: Fees: Foreign Countries: Formative Evaluation: Information Needs: Information Networks: *Information Retrieval: International Programs: *Online Systems: *Programing
IDENTIFIERS Europe (West): *European Documentation and Information System

ABSTRACT

This report examines the possibilities, problems, costs, and benefits of providing online access to the database of the European Documentation and Information System for Education (EUDISED), which is in machine-readable form, but generally available only through the EUDISED R&D Bulletin. The likely nature of such online access is described, including searchable fields and the use of descriptors from the 5-language EUDISED Thesaurus. Three alternative types of arrangements between online systems and database suppliers are discussed, and probable costs for both the Council of Europe and the individual researcher are indicated. Benefits are discussed in terms of the individual researcher, national agencies, and the Council of Europe. It is recommended that the database be made available online if favorable financial terms can be found, and options open to the Council for converting the bibliographic database of the Documentation Centre into machine-readable form are briefly discussed. Appendices include a list of the contents of the EUDISED magnetic tapes, and additional information on the geographical accessibility of online systems, costs for mounting the EUDISED database on BRS and on Lockheed, telecommunications charges, and the availability of other databases on online systems. (RAA)

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COUNCIL OF EUROPE
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ED197737

Strasbourg, 5 September 1980

DECS/Doc (80) 29
Or. Engl.

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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On-line access to the EUDISED R & D data base:
a cost-benefit analysis

and

Computerization of the data base of the Documentation Centre for Education in Europe: a preliminary option survey

Report

prepared by

J. E. Pache, Peter Peregrinus Ltd

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Abstract

This report studies the possibilities, problems, costs and benefits of providing on-line access to the EUDISED R&D Data-Base. The likely nature of such on-line access is described and the searchable fields such as the EUDISED descriptors in all five languages are mentioned. The problems of getting the Data-Base on-line are discussed. It is pointed out that on-line system suppliers might take the Data-Base on as a likely revenue earner or might require to be paid for doing so. The costs involved in an on-line data-base are given. The costs to the Council might be minimal or 5,000-10,000 Fr. per year. The hourly search costs for an individual to search the Data-Base could be 300-550 Fr. per hour. The benefits derived from the Data-Base for the Council, the National Agencies and the individual researcher are discussed. The researcher would have increased access to the data which would be more easily searchable and more generally available. The National Agencies and the Council would benefit by their data being more widely used and by European education research possibly gaining in prestige. The Council might also gain financially. The Council is recommended to consult a number of on-line system suppliers and put the Data-Base on-line if acceptable terms can be arranged. The report briefly discusses the options, in-house and by bureau, to computerize the Documentation Centre Data-Base. This operation could produce another on-line data-base and a COM catalogue.

1. The EUDISED R&D Data-Base On-Line:

1.1 The Description

The EUDISED R&D Bulletin is produced by computer-composition and typesetting from computer files which collectively comprise the EUDISED R&D Data-Base. A by-product, for computer information-retrieval, of this data-base is the EUDISED R&D Magnetic Tape Service which has not to-date been extensively utilised. A list of the data-fields on the tapes is included as Appendix A. The complete set of such tapes could be supplied to and mounted on a publicly-available on-line computer retrieval system or systems.

No alteration in the data or the format of the data is required. The Centre for Educational Documentation carefully edits the information going into the Data-Base for completeness and therefore sufficient information will be present on the tapes. The data-elements required for on-line searching are present in a manner suitable for computer searching. Furthermore the tape is in the 'INSPEC' implementation of the MARC (Machine-Readable Catalogue) format in common with several other data-bases and most of the on-line systems have had experience of handling this format.

Access to the on-line system or systems would be through the public switched telephone networks and in some cases through specialised data networks such as Euronet or Telenet. These specialised networks connect the on-line computer systems to remote public switched telephone networks. The geographical area from which access is available depends on the on-line computer system. Appendix B gives lists of countries that can access the various on-line systems considered in this report. The main criteria for including systems are that access is available to most Council of Europe countries and that they provide retrieval from files of a broadly similar nature. This latter point is because most prospective on-line users of the EUDISED R&D Data-Base will already use such systems for other information requirements and the rest are more likely to use EUDISED if other similar information is available from the same source.

The keys by which the user would be able to search the EUDISED R&D Data-Base would depend upon which on-line system the Data-Base was mounted on and possibly either how much effort the on-line system organiser was willing to make or how much the Council was willing to pay.

However, the following fields would almost certainly be searchable elements:

Title (original language and English or French translation)

EUDISED facets

EUDISED descriptors (in all five languages)

Other terms (fields 132, 133, 134 and 135, see Appendix A)

Language

Researchers and Supervisors

Abstract numbers

National identity numbers

Institutions (including Parent Institutions)

Other fields that might possibly be searchable are:

Abstract

'On-going' or 'Complete'

Source of finance

Dates of project

The remaining fields would probably not be very useful for searching. All fields, however, could be included on any resulting print-out.

The user would be able to search for items by Boolean combinations of the search keys implemented. Even with the minimal set of search keys the user has access to controlled language descriptors in five languages. This search ability could be enhanced if the EUDISED Thesaurus were available in a suitable format on a magnetic tape. Several on-line systems have the capability of loading thesauri and providing on-line displays of appropriate sections to assist the user to select the best search term.

Complete or partial data from each retrieved item could be displayed on-line or printed off-line on a line-printer and posted to the user. The on-line display would usually be partial details to assess the effectiveness of the search strategy or sometimes full details when the information is required urgently. Usually though the final results would be printed out off-line and despatched by post. In this case the user would normally receive them within four working days even if the on-line system were in the United States of America.

It is not possible to describe the EUDISED R&D On-Line Data-Base in any greater detail as most details depend upon the features of the particular on-line system.

2. Getting the EUDISED R&D Data-Base On-Line:

2.1 Methods and Problems

There are a variety of sets of conditions under which on-line system suppliers will mount data-bases. However, there are three main categories of arrangement that can be made between on-line system and data-base supplier. These are:

(i) The "Commercial" Basis

In this type of arrangement the on-line system supplier invests time and money in loading the data-base, setting up the inverted files needed for retrieval, and regularly updating the file. They also publicize the data-base along with the others available on their system. The data-base supplier receives a royalty based on usage. This arrangement is very attractive to data-base suppliers: they can receive royalties for little or no effort. However, they will get greater royalties if they publicize the file and produce and supply user aids and possibly provide education to users and potential users. The draw-back is that on-line system suppliers will only offer such a deal if they believe that they will recoop their investment and make a profit from the usage charges. As there are now numerous data-bases around, the on-line system suppliers can pick the best prospects which tend to be large files, going back several years and covering wide or popular subject areas. For data-bases that are of marginal profitability the on-line system suppliers tend to request terms that will maximize their profit. These are such things as contractual agreements that the particular data-base will only be made available on the particular system. Data-base suppliers should consider before entering such an agreement whether the on-line system will be attractive to their prospective customers of whatever organisation type or geographic location.

(ii) The "Private File" Basis

In this type of arrangement the on-line supplier acts rather like a computer service bureau. The data-base supplier pays for loading, updating and storing the data-base. They also pay for usage, but can arrange for users to have access to the data-base and pay the on-line system supplier's charge plus a royalty for the privilege. In this situation the data-base supplier is investing money in the hope that the royalties will produce a profit or that any loss will be small and/or out-weighed by the benefits of having their file available. The data-base supplier would only opt for this "Private File" arrangement if no suitable on-line system supplier would take the data-base on a "Commercial" basis. Any profit is likely to be marginal as on-line system suppliers have a fairly good idea of which data-bases will make money.

The only advantage of this arrangement is that the data-base supplier has complete control over the data-base and does not have to accept possible conditions in order to get the data-base mounted.

(iii) The "Subsidised" Basis

The last possibility might be worth consideration if (i) is not possible and (ii) is too expensive. Some on-line system suppliers are not commercial organisations and therefore do not necessarily have a profit as their raison d'etre. Such an organisation might consider that the general benefits of a data-base being available to the public were in accordance with its aims and worth subsidizing. The on-line system supplier would mount the data-base and hope if possible to break-even. All the data-base supplier would receive would be the ability to search his data on-line and whatever benefits accrue from his data reaching a wider audience. If the data-base did surprisingly become profitable the data-base supplier might be able to renegotiate terms with the system supplier and receive income. However, it is most unlikely that this situation would arise.

2.2 Other Factors

The other factors which should be considered by a data-base supplier when deciding which on-line systems suppliers to approach are:

(i) Geographical coverage of the system

Appendix B gives details of the geographical accessibility of various groups of on-line systems. If and when Euronet is connected to Austria, Finland, Norway, Spain and Sweden all the on-line systems considered here will be available in all those countries that contribute to the EUDISED R&D Data-Base. Whilst the Council will obviously consider it desirable that any on-line implementation of the EUDISED R&D Data-Base should be available to all contributor countries, there would also be distinct benefits from having the Data-Base available in Canada and USA. There is a large amount of educational research carried out in North America and a greater awareness of educational research in Europe would be an advantage to that community. On-Line usage is more accepted and widespread in North America than in Europe (especially in academic establishments). Hence there is a not insignificant market in North America for an on-line EUDISED data-base.

(ii) Other data-bases on the system

Some on-line systems are dedicated to particular highly-specialized types of files. These might be subject specific such as the DIMDI system which specializes in the life sciences (medical, biological and agricultural).

Some systems have their own files only, physical data only, or administrative/legal data only. These types of on-line system suppliers would obviously not be interested in the EUDISED R&D Data-Base.

A data-base will get greater usage (all other factors being equal) if mounted on a system with complementary data-bases. Complementary here means covering the same subject area of different type or of the same type and covering a different subject area. Data-Bases from the former category are the educational bibliographic data-bases such as ERIC (Education Resources Center, USA). Data-bases from the latter category are the research data-bases: AGREP (agricultural research) and Smithsonian Science Information Exchange (SSIE, general scientific research) and the 'Europe-orientated' data-base: EABS (reports and results of CEC funded research) and EUROFILE (inventory of data-bases in Europe) and the multilingual EURODICAUTOM (multilingual terminology data-bank). These non-bibliographic data-bases are like EUDISED small files and on-line system suppliers that provide access to them might be expected to be more inclined to consider mounting the EUDISED R&D Data-Base favourably.

2.3 Specific systems

The on-line system suppliers who meet or might soon meet the geographic criteria and who either operate private file services or provide access to even vaguely similar data-bases are: BRS (New York), Datacentralen (Copenhagen), ECHO (CEC, Luxembourg), ESA (Frascati), Lockheed (Palo Alto), Radio-Suisse (Berne), SDC (Santa Monica) and Spidel (Paris). A table of these on-line systems, some files they provide access to and some other of their attributes, is given in Appendix F .

3. Costs of a EUDISED R&D On-Line Data-Base

The costs given here that relate to on-line system suppliers charges can only be approximate guidelines. The main reason for this is that their portion of the total on-line costs vary not just from system to system, but often from data-base to data-base. With the exception of the 'Private File Services', they do not advertise their charges except on the basis of a 'total' charge that includes royalties. If the EUDISED R&D Data-Base had to be put on-line as a 'Private File', it would be a special case for such files as the Council would presumably want access to be to all password-holders on the particular system. The terms for this access might not be as in their published price schedules.

In summary any on-line system supplier might impose an above normal charge or allow a special discount in the particular case of the EUDISED R&D Data-Base. This could only be determined by discussions between the Council and the system supplier.

Also the costs given here are based on the following assumptions:

(i) Future costs are given at present rates thus ignoring inflation.

(ii) 1 Fr. = 1 Kr. = £0.10 = $0.24

(iii) An average on-line search would take 15 min. and involve the transmission of 200 segments of up to 64 characters.

3.1 Costs to the Council of Europe

The costs can be divided into two categories: general and on-line-system-related.

The general costs comprise tape production and despatch, Council staff-time and possible loss of present income. The tape production and despatch cost (about 500 Fr.) would be incurred initially and every time that the Data-Base was updated. The product will be particularly attractive if the Data-Base is updated frequently. However, as the Bulletin production rate is likely to be four issues of only about 250 items per year, there is not much point in updating the on-line data-base more frequently than four times a year. Also, updating only once per year will probably be thought of poorly by users. Hence the production and despatch costs are likely to be 1000-2000 Fr. per year.

The Council should be prepared for some staff-time for initial discussions with on-line system suppliers and maintaining contact and supervising the undertaking. This report cannot estimate this amount of time nor the cost involved. Also effort could be profitably put to publicising the Data-Base and promoting its usage. A moderate effort in this direction should at least pay for itself.

A possible cost might be any loss of income due to reduced subscriptions through present customers turning to on-line usage. Many have predicted that this effect will occur, but it does not yet seem to have affected established data-bases. It is unlikely that this will substantially affect EUDISED in the next few years.

The system related costs depend upon the sort of arrangement that can be agreed between the Council and the on-line system supplier. If the system supplier agrees to the appropriate arrangement, there will be no costs in this category. However, the Council might have to pay to have the Data-Base put on-line. The systems which provide private file services are BRS, Lockheed, Radio-Suisse and SDC (others might be prepared to mount the EUDISED at an appropriate cost). Of these Radio-Suisse has not yet announced prices and SDC is much more expensive than BRS and Lockheed. The prices of these two are given in Appendices C & D.

If the Data-Base were mounted on Lockheed as a 'Private File', with two updates per year, the total definable costs to the Council for mounting and maintaining the Data-Base would be 6000 Fr. in 1981, 7000 Fr. in 1982 and 8500 Fr. in 1983. However, the costs could be anything from as little as 500 Fr. per update.

3.2 Costs to the Individual User

The individual user of a EUDISED R&D On-Line Data-Base has to pay three sets of charges: telecommunications, on-line system and data-base royalty charges.

The telecommunications costs include the telephone costs from the user's terminal to the on-line system if this is nearby or to an entry point into the data network that is to be used to access the on-line system. The other element of the telecommunications costs is the cost of the data-network. Some of the networks charge a sign-on fee and quarterly or monthly standing charges. These, like the capital or lease costs of the required terminal equipment, are not considered here because the equipment and system-access would most likely be used for searching other data-bases. The total approximate telecommunications costs for users in London, Strasbourg and Stockholm are given in Appendix E for the following networks: Euronet, ESANET and IPSS (access to U.S. on-line systems). If the on-line system were for instance in Strasbourg the costs for a user there would be reduced.

In some countries the costs vary from city to city because some cities have access points to networks and some do not and the telephone cost is distance related. Hence the three users in London, Strasbourg and Stockholm are not necessarily typical, but just three examples.

The on-line system costs could vary from 50-180 Fr. per hour. In most cases the range is only 120-180 Fr. per hour. The much cheaper rates are only available on BRS and to a lesser extent Lockheed as discount rates to customers with very large usage figures. The access charge for 'Private Files' on Lockheed is 125 Fr. per hour, but with discounts available for high usage whilst the charges for BRS are about 70 Fr. per hour. These charges would apply if the Council were to control passwords and access by others to the Data-Base, but as the Council would want any user of the system to be able to use the Data-Base, the exact rates to the whole user population are not apparent.

The data-base royalty rates might be in the range of 150-250 Fr. per hour as is discussed in section 4.3.

Thus taking into account the various possible combinations, the total cost to individual users of the EUDISED R&D Data-Base on-line is likely to be in the range of 300-550 Fr. per hour.

4. Benefits of a EUDISED R&D On-Line Data-Base

4.1 Benefits to an Individual Researcher

The benefits to an individual researcher in the field of education research include those benefits derived from the use of the Bulletin. These primary benefits are information about European education research and thereby access to research results and the other researchers. In any field, knowledge of who is doing what elsewhere is important. This is very often obtained retrospectively by discovering who has published what. With a source of information on research (including current and on-going research) the knowledge is more timely and therefore sometimes more useful.

On-line access to the EUDISED R&D Data-Base has additional benefits. These include the ability to retrieve items from the Data-Base by any combination of search keys. The Bulletin only allows access via researchers' names, EUDISED facets and EUDISED descriptors and not by combinations of these. The other likely on-line search keys (already mentioned in section 1) are: the other index terms, title words, possibly abstract words, language and the institutions involved. If a researcher wanted to search through the whole Data-Base, several indexes are required (the number of cumulative indexes published plus the number of issues since the last cumulative index). With on-line access the researcher could search the whole Data-Base in one go. There is no danger of an on-line system supplier wanting to partition the EUDISED R&D Data-Base, as is done with some of the large data-bases. It would be several hundred years, at the present rate of growth, before the EUDISED R&D Data-Base was as big as the largest files handled by the on-line systems today.

Given equal access to the Bulletin and the On-Line Data-Base, the latter provides greater access to the data. However, an On-Line Data-Base would potentially provide access to more people. The total circulation of the Bulletin is about 500 copies to about 430 separate organisations in 32 different countries. On-line systems are used by over 5,000 organisations. Admittedly, most of these would have no interest in educational research, but almost all Universities and Polytechnics in Western Europe and North America make use of on-line systems. For some education researchers, it would be easier to access an on-line EUDISED R&D Data-Base than the Bulletin.

4.2 Benefits to National Agencies

The benefits to National Agencies from an on-line EUDISED R&D Data-Base would include the greater searchability (mentioned in the previous section) of their own data and those from the other National Agencies. This could be of use not only to search the data in a straight-forward way, but also to study various aspects of the data. On-line bibliographic data-bases have been used for bibliometric studies. The EUDISED R&D Data-Base could be used to study the geographical distribution of research on particular aspects of education. The type of statistical analysis is not automatic, but an adept searcher could compile such data very rapidly. The equivalent study performed on the Bulletin would take considerably longer.

At present, some National Agencies send national collection data, that is not part of the EUDISED R&D Data-Base, through the EUDISED computerised production system. If the EUDISED R&D Data-Base were on-line, a National Agency might be able to arrange for national collection data to be put on-line on the same system as the EUDISED R&D Data-Base. This way they would be able to gain the same benefits from their national collection data and users would be able to search both sets of data with the same search strategy.

4.3 Benefits to the Council of Europe

The benefits to the Council of the EUDISED R&D Data-Base being on-line would include all those of searchability and ability to compile statistics that relate to individual researchers and National Agencies. In addition, the increased availability, world-wide, of the data could increase the prestige of European educational research.

The other, less abstract, benefit to the Council would be royalties from the on-line usage of the Data-Base. Most data-base suppliers receive royalties based on a certain amount per hour that individual searchers are using their file, and an amount for each item that is printed off-line and sent to the searcher. The levels of most royalties in 1981 are likely to be in the range of 100-300 Fr. per hour and 0.50-1.00 Fr. per off-line print. The cheaper data-bases tend to be the larger ones and the most expensive are mainly business and patent data-bases. The main exceptions to the above guidelines are either royalty-free subsidised or highly specialized data-bases. For these reasons it would seem appropriate for the royalty rates for a EUDISED R&D On-Line Data-Base to have royalty rates in the range of 150-250 Fr. per hour and 0.50-1.00 Fr. per off-line print. The final figure would probably have to be decided in consultation with the on-line system supplier. The other factor affecting total royalty rates is even harder to assess. This is usage and might be anything from 50-500 hours per annum although it probably would be in the range of 100-300 hours per annum.

A standard search takes about 15 minutes and might produce 10-30, say 20 off-line prints each. Therefore, the number of off-line prints per annum might be 2,000-6,000. The usage will depend on the royalty level, but as the royalty would be less than half of the total cost, the dependence is not too great. Thus the total royalties to the Council could be anything from 16,000-81,000 Fr.

5. Conclusions and Recommendations

Making the EUDISED R&D Data-Base available on-line to all users and potential users of on-line systems in Europe and North America would produce substantial benefits. Researchers would gain from increased availability, accessibility and searchability of information on European educational research. The Council and the National Agencies would gain in the same way and from the increased awareness and prestige of European education research. The Council might also gain financially.

The costs could be minimal, but might easily be 5,000-10,000 Fr. per year. It is for the Council to discover the exact cost after discussions with on-line system suppliers and decide if the benefits described here outweigh the costs.

This report suggests, therefore, that the Council should take the following steps:

(i) Determine to have the EUDISED R&D Data-Base put on-line if satisfactory financial terms can be found.

(ii) Contact the on-line systems listed in Appendix F (and any others that are seriously suggested in the course of their investigations) and determine under what conditions, if any, they will mount the Data-Base.

(iii) Scrutinize the acceptable propositions and arrange for the Data-Base to be mounted on the system offering the most favourable package of terms.

It is even possible that two system-suppliers may offer favourable terms and that the sum total cost is acceptable. If this occurs, the Council should consider going ahead with both as they will be reaching a larger market.

6. Computerization of the Documentation Centre for Education in Europe Data-Base: Preliminary Option Survey

This section presents the options open to the Council in respect of the computerization of the Documentation Centre Data-Base. This Data-Base is a bibliographic data-base that is not at present in machine-readable form. The documents, whose bibliographic details make-up the Data-Base, are the following:

(i) A complete collection as from 1962 of Council of Europe documents and books in English and French on education.

(ii) 13,500 books of which approximately 60% are in English, 30% in French and 10% in other languages.

(iii) Articles from 320 periodicals.

The amount of data, including an abstract, required for each item in a standard bibliographic data-base is less than the present size of EUDISED R&D items. More discrete fields are required, but the total pre-computer effort per item should be somewhat less than for EUDISED R&D items. The exact amount would depend upon the size of abstract and detail of bibliographic description required. The Council of Europe products, and the books and periodical articles of particular interest, have been indexed since 1974 with EUDISED descriptors. For these items the effort would be less still and in particular no subject knowledge would be required unless the existing abstracts were not considered satisfactory. If the Council did not wish to computerize the whole Data-Base in one step, then the already indexed documents could be processed first. Alternatively, the Council might decide to computerize only the indexed documents.

The computer processing could either be done in-house or by a bureau. The advantages of in-house processing are that it would be possible to have on-line input, editing and access to the data-base. A catalogue could be produced by COM (computer output to microform). This would be achieved by sending a tape to a COM bureau which would generate microfilm or fiche. This a a cheap way of updating the catalogue at frequent intervals. Copies could be easily sent to National Agencies or other intersted bodies. A tape could also be sent to an on-line system and searched alongside EUDISED R&D material as described previously. However, the least equipment required would be a dedicated minicomputer or all-day, fairly high priority access to part of a mainframe computer. Such an arrangement could also cope with computerizing the acquisition control of the periodicals. This option is expensive especially in software development costs. If the Council wished to pursue this, it should be considered along with the Council's total computer requirements.

If the processing were done on a bureau computer, the only capital investment would be in software development. This aspect would be minimal if the bureau had a general package for data-base creation and updating or processed similar files at present. It must be said that PPL could possibly undertake such processing in a similar way to the processing of the EUDISED R&D Data-Base with not too much extra software development, but should the Council wish to choose the option it should seek tender from several such organisations. This option could provide a COM catalogue, a tape ior on-line systems, but not any assistance for periodical acquisition. It would, however, be cheaper.

A possible third option is a mixed system where word-processor-type machines are used in-house for input and initial editing. The data would then be passed to a bureau as these machines could not handle the complete operation, which really requires the storage on disc of the EUDISED thesaurus as an authority file. There are at present problems with data-interchange between word-processors and mainframe computers, but this option could be brought in after the project had already started and could replace the initial input method which might be OCR (optical character recognition) from specially typed sheets or some similar method of bulk data-entry.

Whatever option is chosen the important benefits that can be derived from such a computerization are production of a COM catalogue and on-line access to the Data-Base if this can be arranged. If the on-line access were on a system such as Lockheed that had an on-line ordering facility, users could order copies of Council publications automatically on the system. The system supplier would then send the order to the Documentation Centre.

This preliminary option survey does not include cost data because no meaningful estimates could be given at this stage.

Contents of EUDISED Magnetic Tape Service

Field	Description
001	Control number (abstract number)
100	Title of research (in original lanuage)
101	Title of research (translated into English or French)
110	Abstract
120	EUDISED facet numbers
130	EUDISED descriptors in English
131	EUDISED descriptors in French
132	Descriptors in national language
133	Terms from neighbouring fields
134	National terms
135	Provisional EUDISED descriptors
136	EUDISED descriptors in Dutch
137	EUDISED descriptors in German
138	EUDISED descriptors in Spanish
160	Language
200	Researcher(s)
201	Research supervisor(s)
300	Abstract number
310	National identity number
320	'On-going' or 'complete'
330	Microfiche indicator
400	Publications
700	Institution
710	Parent Institution
760	Source of finance
800	Dates of project

The format of the tapes is the "INSPEC" implementation of the MARC (Machine-readable catalogue) format.

Geographical Accessibility of On-Line Systems

Countries covered by Euronet:

Belgium	Italy
Denmark	Luxembourg
France	Netherlands
W.Germany	United Kingdon
Ireland	

In addition, several other countries may become connected to Euronet. Individual discussions are apparently in progress with the following:

Austria	Spain
Finland	Sweden
Norway	

ESA (The European Space Agency) provides on-line access to the Euronet countries, Finland, Norway, Spain, Sweden and potentially Austria through its own ESANET and the Scandanavian SCANNET.

The U.S.A. on-line systems: Bibliographic Retrieval Services (BRS), Lockheed Dialog and System Development Corporation (SDC) are available in all the above countries and others including:

Australia	New Zealand
Canada	U.S.A.

Lockheed and SDC are now available in Japan.

Costs for mounting the EUDISED R&D Data-Base on the BRS

Private File Service

1. BRS Charge Structure

(i) Initial File Load:

Minimum charge for up to 20,000 records	$1000
Additional charge for each record	$0.05

(ii) Updates:

Minimum charge for up to 2,000 records	$100
Additional charge for each record	$0.05

(iii) Storage:

Charge per million characters per month	$ 12

2. Assumptions

(i) Initial file load at beginning 1981 with a file size of 2,500 records.

(ii) Average size of record in MARC format is 2,500 characters.

(iii) If updates are made annually they are made at the end of December, if semi-annually than in June and December and if quarterly then in March, June, September and December.

3. Costs

Updates p.a.	Costs p.a.		
	1981	1982	1983
1	$1500	$1360	$1720
2	$1690	$1550	$1910
4	$1935	$1795	$2155

Costs for mounting the EUDISED R&D Data-Base on the Lockheed Dialog Private File Service

1. Dialog Charge Structure

(i) Initial File Load:

Minimum charge for up to 10,000 records	$500
Additional charge for each record	$0.05

(ii) Updates:

Minimum charge for up to 1,000 records	$ 50
Additional charge for each record	$0.05

(iii) Storage:

Charge per million characters per month	$ 12

2. Assumptions

(i) Initial file load at beginning 1981 with a file size of 2,500 records.

(ii) Average size of record in MARC format is 2,500 characters.

(iii) If updates are made annually they are made at the end of December, if semi-annually than in June and December and if quarterly then in March, June, September and December.

3. Costs

Updates p.a.	Costs p.a.		
	1981	1982	1983
1	$ 950	$1310	$1670
2	$1090	$1450	$1810
4	$1235	$1595	$1955

Total Approximate Telecommunications Charges for

On-Line Access: Amount in Fr. / Hour

Location / Access Method	London *	Strasbourg	Stockholm
Euronet	33.32 29.80	32.00	-
ESANET	133.64 133.00	118.80	131.20
IPSS (Access to U.S. Systems)	102.52 99.00	106.00	182.40

* Two figures are given. The upper is from 9am to 1pm and the lower is from 1pm to 6pm.

Potential On-Line Systems for the EUDISED R&D Data-Base

On-Line System / Attribute	BRS	Datacentralen	ECHO	ESA	Lockheed	Radio-Suisse	SDC	Spidel
Location								
Europe		*	*	*		*		*
U.S.A.	*				*		*	
Education Files								
Child Abuse					*			
Educational Media					*			
ERIC	*				*		*	
Exceptional Child	*				*			
Education Resources	*				*			
Special Education Materials	*				*			
Other Files								
AGREP		*	*					*
EABS			*					
EURODICAUTOM			*					
EUROFILE				*				
SSIE	*				*		*	
Private Files	*				*	*	*	